



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/874,433 | 06/04/2001 | Margo N. Whale | 10007200-1 | 5662 |

7590 07/18/2003

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

SORRELL, ERON J

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 07/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,433

Applicant(s)

WHALE, MARGO N.

Examiner

Eron J Sorrell

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* ☐ attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

Art Unit: 2182

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,2,4-7,10,11,22-28,30,31, and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by McGraw (U.S. Patent No. 6,097,497) .

3. Referring to claim 1, McGraw teaches a printing device comprising:

a media routing assembly configured to route a print media for printing (see lines 33-49 of column 3);

a scanning device configured to recognize a media identifier that identifies the print media when the print media is routed by the media routing assembly (see lines 58-66 of column 2);

Art Unit: 2182

an application component configured to determine a brand of the print media from the recognized media identifier (see lines 58-66 of column 2).

4. Referring to claim 2, McGraw discloses the printing device comprises a memory component configured to maintain information corresponding to a total number of print media routed by the media routing assembly, and a total number of a particular brand of print media having a recognize media identifier (see lines 37-53 of column 6).

5. Referring to claim 4, McGraw discloses the application component is further configured to determine a type of print media from the recognized media identifier (see lines 66-67 of column 4 and lines 1-9 of column 5).

6. Referring to claim 5, McGraw discloses the printing device further comprises a memory component configured to maintain information corresponding to a total number of print media routed by the media routing assembly (see lines 37-53 of column 6), wherein the application component is further configured to determine a type of print media from the recognized media identifier (see lines 66-67 of column 4 and lines 1-9 of column

Art Unit: 2182

5), and wherein the memory component is further configured to maintain information corresponding to a total number of a particular brand and a particular type of print media having a recognizable media identifier (see lines 37-53 of column 5).

7. Referring apparatus claim 6 and method claim 30, McGraw discloses the scanning device is an optical scanner configured to recognize the media identifier, and wherein the media identifier is an image on the print media (see lines 53-65 of column 5).

8. Referring claim 7 and method claim 31, McGraw discloses the scanning device is an optical scanner configured to recognize the media identifier, and wherein the media identifier is a watermark (see lines 53-65 of column 5; Note the Examiner is interpreting the image that can be see with visible or invisible light is equivalent to a watermark).

9. Referring to claim 10, McGraw discloses the application component is further configured to determine the percentage of a total number of a particular brand of print media having a recognizable media identifier to a total number of print media

Art Unit: 2182

routed by the media routing assembly (see lines 37-53 of column 6).

10. Referring to claim 11, McGraw discloses the printing device further comprises a memory component configured to maintain information corresponding to a total number of print media routed by the routing assembly (see lines 37-53 of column 6), a total number of a particular brand of print media having a recognizable media identifier, (see lines 37-53 of column 6), and a percentage of the total number of a particular brand of print media, wherein the application component is further configured to determine the percentage (see lines 37-53 of column 6).

11. Referring to claim 22, McGraw teaches a method comprising:
routing a print media in a printing device (see lines 33-49 of column 3);

determining a type of the print media from a media identifier when routing the print media (see lines 58-66 of column 2);

maintaining information with a memory component, the information corresponding to a total number of print media routed in the printing device and a total number of a particular

Art Unit: 2182

type of print media having a determinable media identifier (see lines 38-53 of column 6).

12. Referring to claim 23, McGraw teaches the method further comprises determining the total number of print media routed in the printing device, and determining the total number of a particular type of print media have a determinable media identifier (see lines 38-53 of column 6).

13. Referring to claim 24, McGraw teaches the method further comprises determining a percentage of the total number of a particular type of print media to the total number of print media routed on in the printing device (see lines 38-53 of column 6).

14. Referring to claim 25, determining the total number of print media routed in the printing device (see lines 38-53 of column 6);

determining the total number of a particular type of print media having a determinable media identifier (see lines 38-53 of column 6); and

Art Unit: 2182

determining a percentage of the total number of a particular type of print media to the total number of print media (see lines 38-53 of column 6);

15. Referring to claim 26, McGraw discloses the method further comprises determining a brand of the print media from the media identifier when routing the print media (see figure 3A).

16. Referring to claim method claim 27 and computer-readable medium claim 36, McGraw discloses the method further comprises determining a brand of the print media from the media identifier when routing the print media (see figure 3A);

determining a type of the print media from the media identifier (see figure 3A);

determining the total number of print media routed in the printing device (see lines 38-53 of column 6);

determining the total number of a particular brand and particular type of print media having a determinable media identifier (see lines 38-53 of column 6); and

determining a percentage of the total number of a particular brand and a particular type of print media to the total number of print media (see lines 38-53 of column 6).

Art Unit: 2182

17. Referring to claim 28, McGraw teaches the method further comprises determining a brand of the print media from the media identifier when routing the print media (see figure 3A), and maintaining information corresponding to a total number of a particular brand and particular type of print media having a determinable media identifier (see lines 38-53 of column 6).

18. Referring to claim 37, McGraw teaches one or more computer readable media wherein the method further comprises maintaining information with a memory component, the information corresponding to the total number of print media routed in the printing device, the total number of a particular brand and a particular type of print media, and the determined percentage (see lines 38-53 of column 6).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2182

20. Claims 8 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGraw.

21. Referring to apparatus claim 8 and method claim 32, McGraw teaches the scanning device is an optical scanner configured to recognize a media identifier, which is a watermark (see lines 53-65 of column 5).

McGraw fails to teach the media identifier is a product barcode implemented as a watermark.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the apparatus of McGraw such that the media identifier is a product barcode implemented as a watermark because standard already exist for converting barcodes to numerical representations and vice versa and the apparatus of McGraw uses a numerical scheme for the media identifier (see figure 3A).

22. Claims 3 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGraw in view of Purcell et al. (U.S. Patent No. 6,375,298 hereinafter Purcell).

23. Referring to apparatus claim 3 and method claim 34, McGraw teaches the memory component is configured to maintain

Art Unit: 2182

information corresponding to a total number of print media routed by the media routing assembly, and a total number of a particular brand of print media having a recognizable media identifier (see lines 37-53 of column 6).

McGraw fails to teach the memory component is integrated with a replaceable component of the printing device.

Purcell teaches, in an analogous apparatus, a replaceable component in a printing device with an integrated memory device (see lines 51-60 of column 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the apparatus of McGraw such that the memory element is integrated with a replaceable component of the printer. One would have been motivated to make such modification to allow for automatic and/or easy manual printer optimization as suggested by Purcell (see lines 66-67 of column 1).

24. Claims 12-14,16-19,21,29, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGraw in view of Czyszczewski et al. (U.S. Patent No. 6,577,907 hereinafter Czyszczewski).

25. Referring to claim 12, McGraw teaches a printer comprising:

a media identification component configured to recognize a media identifier that identifies a print media when the print media is routed for printing with the printing device (see lines 58-66 of column 2); and

an application component configured to determine a type of the print media from the recognized media identifier (see lines 58-66 of column 2).

McGraw fails to teach the printer being one of a plurality of printers in a system, and an information database configured to maintain information from the plurality of printing devices, the information corresponding to a total number of print media routed for printing, and a total number of a particular type of media having a recognizable media identifier, however, McGraw does disclose that this statistical information is calculated by the printing device (see lines 37-53 of column 6).

Czyszczewski teaches a system comprising a plurality of printers (see lines 12-25 of column 7) and an information database configured to maintain information from the plurality of printing devices (see lines 31-54 of column 9).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the the teachings of McGraw with the teachings of Czyszczewski such that the system comprises a plurality of printers and an information

Art Unit: 2182

database configured to maintain information from the plurality of printing devices so the printers can be associated with various network configurations.

26. Referring to claim 13, Czyszczewski teaches the system further comprises a network communication system configured to connect the plurality of printing devices with the information database, wherein the information database is remotely located from the printing devices (see lines 11-20 of column 3).

27. Referring to claim 14, McGraw teaches the individual printing device comprises a memory component configured to maintain the information for the individual printing device (see lines 37-53 of column 6).

28. Referring to system claim 16 and method claim 35, Czyszczewski teaches a computing device connected to one or more of the plurality of printing devices, the computing device comprising a memory component configured to maintain the information for one or more print devices (see lines 11-20 of column 3).

Art Unit: 2182

29. Referring claim 17, McGraw discloses the scanning device is an optical scanner configured to recognize the media identifier, and wherein the media identifier is an image on the print media (see lines 53-65 of column 5).

30. Referring claim 18, McGraw discloses the scanning device is an optical scanner configured to recognize the media identifier, and wherein the media identifier is a watermark (see lines 53-65 of column 5; Note the Examiner is interpreting the image that can be see with visible or invisible light is equivalent to a watermark).

31. Referring to claim 19, McGraw teaches the scanning device is an optical scanner configured to recognize a media identifier, which is a watermark (see lines 53-65 of column 5).

McGraw fails to teach the media identifier is a product barcode implemented as a watermark.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the apparatus of McGraw such that the media identifier is a product barcode implemented as a watermark because standard already exist for converting barcodes to numerical representations and

Art Unit: 2182

vice versa and the apparatus of McGraw uses a numerical scheme for the media identifier (see figure 3A).

32. Referring to claim 21, Czyszczewski teaches the database maintains statistical information corresponding to a percentage of the total number of a particular type of print media to the total number of print media (see lines 31-54 of column 9).

33. Referring to claim 29, Czyszczewski teaches obtaining the information from the memory component, and storing the information in an information database (see lines 11-20 of column 3).

34. Claims 9 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGraw in view of Guillory et al. (U.S. Patent No. 5,925,889 hereinafter Guillory).

35. Referring to claims apparatus claim 9 and method claim 33, McGraw fails to teach the scanning device is a chemical detection device configured to recognize the media identifier, and wherein the media identifier is a chemical substance on the print media.

Art Unit: 2182

Guillory teaches, in an analogous apparatus, a printer with a scanning device that is a chemical detection device configured to recognize the media identifier, and wherein the media identifier is a chemical substance on the print media (see lines 64-67 of column 1 and lines 1-3 of column 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the apparatus of McGraw such that the scanning device that is a chemical detection device configured to recognize the media identifier, and wherein the media identifier is a chemical substance on the print media. One of ordinary skill in the art at the time of the applicant's invention would have been motivated to make such modification in order to ensure high quality printing on media having slight variation in surface gloss as suggested by Guillory.

36. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over McGraw in view of Czyszczeński as applied to claim 12 above, and further in view of Purcell.

37. Referring to claim 15, McGraw teaches the memory component is configured to maintain the information for the one or more printing devices (see lines 38-53 of column 6), however, both

Art Unit: 2182

McGraw and Czyszczewski fail to disclose the memory component being integrated with a replaceable component of the individual printing device.

Purcell teaches, in an analogous apparatus, a replaceable component in a printing device with an integrated memory device (see lines 51-60 of column 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of McGraw and Czyszczewski such that the memory element is integrated with a replaceable component of the printer. One would have been motivated to make such modification to allow for automatic and/or easy manual printer optimization as suggested by Purcell (see lines 66-67 of column 1).

38. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over McGraw in view of Czyszczewski as applied to claim 12 above, and further in view of Guillory.

39. Referring to claim 20, both McGraw and Czyszczewski fail to teach the scanning device is a chemical detection device configured to recognize the media identifier, and wherein the media identifier is a chemical substance on the print media.

Art Unit: 2182

Guillory teaches, in an analogous apparatus, a printer with a scanning device that is a chemical detection device configured to recognize the media identifier, and wherein the media identifier is a chemical substance on the print media (see lines 64-67 of column 1 and lines 1-3 of column 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of McGraw and Czyszczewski such that the scanning device that is a chemical detection device configured to recognize the media identifier, and wherein the media identifier is a chemical substance on the print media. One of ordinary skill in the art at the time of the applicant's invention would have been motivated to make such modification in order to ensure high quality printing on media having slight variation in surface gloss as suggested by Guillory.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the

Art Unit: 2182

objections made. Applicant must also show how the amendments avoid such references and objections. See 37 CFR § 1.111(c).

The following U.S. Patents have been cited to further show the state of the art as it pertains to media identifiers in printing devices:

U.S. Patent No. 6,099,178 to Spurr et al.

U.S. Patent No. 6,527,356 to Spurr et al.

U.S. Patent No. 6,425,650 to Walker et al.

U.S. Patent No. 6,291,829 to Allen et al.

U.S. Patent No. 5,564,841 to Austin

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J Sorrell whose telephone number is 703 305-7800. The examiner can normally be reached on Monday-Friday 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery A Gaffin can be reached on 703 308-3301. The fax phone numbers for the organization where this application or proceeding is assigned are 703 746-7239 for regular communications and 703 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-3900.


JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Application/Control Number: 09/874,433

Page 19

Art Unit: 2182

EJS

July 16, 2003